

Serial No. 09/773,935
Amdt. dated December 17, 2003
Reply to Office Action of September 17, 2003

Docket No. YHK-0062

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A plasma display panel having discharge cells arranged in a matrix type, comprising:
sustaining electrodes formed at the boundary portions between the discharge cells; and
trigger electrodes formed at the inner sides of the discharge cells.

2. (Original) The plasma display panel as claimed in claim 1, wherein the trigger electrodes are adjacent to any one of the sustaining electrodes formed at the boundary portions where they are formed.

3. (Original) The plasma display panel as claimed in claim 1, wherein the sustaining electrodes and the trigger electrodes are transparent electrodes.

4. (Original) The plasma display panel as claimed in claim 1, further comprising:
bus electrodes formed from a conductive material having a light-shielding property at the centers of the sustaining electrodes and the sustaining electrodes.

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5. (Original) The plasma display panel as claimed in claim 1, further comprising:
first barrier ribs arranged in parallel to the sustaining electrodes.

6. (Original) The plasma display panel as claimed in claim 1, further comprising:
first barrier ribs arranged in a direction crossing the sustaining electrodes.

7. (Original) The plasma display panel as claimed in claim 5, wherein the first barrier
ribs overlap with the bus electrodes provided at the sustaining electrodes.

8. (Currently Amended) A method of driving a plasma display panel having sustaining
electrodes formed at the boundary portions between the discharge cells, trigger electrodes
formed at the inner sides of the discharge cells and lattice-shaped barrier ribs for surrounding the
discharge cells, including a reset period, an address period and a sustaining period, wherein said
sustaining electrodes are substantially overlapping and parallel to the boundary portions between
the discharge cells, said method comprising the steps of:

applying a reset pulse to the sustaining electrodes during the reset period;
applying a scanning pulse to the trigger electrodes during the address period;
applying a first sustaining pulse to the trigger electrodes during the sustaining period; and

applying a second sustaining pulse to the sustaining electrodes in such a manner to be alternate with the first sustaining pulse.

9. (Original) The method as claimed in claim 8, wherein the first sustaining pulse and the second sustaining pulse are set to have the same voltage.

10. (Currently Amended) A method of driving a plasma display panel having sustaining electrodes formed at the boundary portions between the discharge cells, trigger electrodes formed at the inner sides of the discharge cells and barrier ribs formed in a direction crossing the sustaining electrodes, including a reset period, an address period and a sustaining period, wherein said sustaining electrodes are substantially overlapping and parallel to the boundary portions between the discharge cells, said method comprising:

a first sub-field for applying a scanning voltage pulse to odd-numbered trigger electrodes during the address period; and

a second sub-field for applying a scanning voltage pulse to even-numbered trigger electrodes during the address period.

11. (Original) The method as claimed in claim 10, further comprising the steps of:

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applying a first sustaining pulse to the odd-numbered trigger electrodes in the sustaining period of the first sub-field;

applying a second sustaining pulse alternating with the first sustaining pulse to the even-numbered trigger electrodes; and

applying a third sustaining pulse synchronized with the second sustaining pulse to the sustaining electrodes.

12. (Original) The method as claimed in claim 11, wherein the first sustaining pulse, the second sustaining pulse and the third sustaining pulse are set to have the same voltage.

13. (Original) The method as claimed in claim 10, further comprising the steps of:
applying a first sustaining pulse to the trigger electrodes in the sustaining period of the first sub-field;

applying a second sustaining pulse to the even-numbered sustaining electrodes in synchronization with the first sustaining pulse; and

applying a third sustaining pulse to the odd-numbered sustaining electrodes in such a manner to be alternate with the second sustaining pulse.

14. (Original) The method as claimed in claim 13, wherein the second sustaining pulse and the third sustaining pulse are set to have the same voltage level, and the first sustaining pulse is set to have a voltage level lower than the second and third sustaining pulse.

15. (Original) The method as claimed in claim 13, wherein the first sustaining pulse maintains a first voltage level when the second sustaining pulse is applied while having a second voltage level lower than the first voltage level when the third sustaining pulse is applied.

16. (Currently Amended) A method of driving a plasma display panel having sustaining electrodes formed at the boundary portions between the discharge cells, trigger electrodes formed at the inner sides of the discharge cells and barrier ribs formed in a direction crossing the sustaining electrodes, including a reset period, an address period and a sustaining period, wherein said sustaining electrodes are substantially overlapping and parallel to the boundary portions between the discharge cells, said method comprising:

a first sub-field for applying a scanning voltage pulse to even-numbered trigger electrodes during the address period; and

a second sub-field for applying a scanning voltage pulse to odd-numbered trigger electrodes during the address period.

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17. (Original) The method as claimed in claim 16, further comprising the steps of:
applying a first sustaining pulse to the even-numbered trigger electrodes in the sustaining period of the first sub-field;
applying a second sustaining pulse alternating with the first sustaining pulse to the odd-numbered trigger electrodes; and
applying a third sustaining pulse synchronized with the second sustaining pulse to the sustaining electrodes.

18. (Original) The method as claimed in claim 17, wherein the first sustaining pulse, the second sustaining pulse and the third sustaining pulse are set to have the same voltage.

19. (Original) The method as claimed in claim 16, further comprising the steps of:
applying a first sustaining pulse to the trigger electrodes in the sustaining period of the first sub-field;
applying a second sustaining pulse to the odd-numbered sustaining electrodes in synchronization with the first sustaining pulse; and
applying a third sustaining pulse to the even-numbered sustaining electrodes in such a manner to be alternate with the second sustaining pulse.

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20. (Original) The method as claimed in claim 19, wherein the second sustaining pulse and the third sustaining pulse are set to have the same voltage level, and the first sustaining pulse is set to have a voltage level lower than the second and third sustaining pulse.

21. (Original) The method as claimed in claim 19, wherein the first sustaining pulse maintains a first voltage level when the second sustaining pulse is applied while having a second voltage level lower than the first voltage level when the third sustaining pulse is applied.

22. (New) A plasma display panel, comprising:
sustaining electrodes at the boundary of discharge cells, each sustaining electrode
extending into the discharge cells adjacent above and below; and
trigger electrodes formed in the discharge cells.

23. (New) The plasma display panel according to claim 22, wherein the trigger electrode is near to any one of sustaining electrodes positioned in each discharge cell.